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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,254	03/04/2002	Hisanori Tsuchino	02110/LH	6805

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EXAMINER

HO, ALLEN C

ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/091,254	Applicant(s) TSUCHINO, HISANORI	
	Examiner Allen C. Ho	Art Unit 2882	<i>AW</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamayoshi (U. S. Patent No. 6,707,880 B2) in view of Tachi *et al.* (U. S. Patent No. 6,027,247).

With regard to claim 13, Yamayoshi disclosed a radiographing apparatus, comprising: a radiographing sections (3, 17) to form an image corresponding to radiation received from a radiation irradiating section (1); a first operating device (7) located remote from the radiographing section and electrically connected to the radiographing section to set a radiographing condition of the radiographing section, wherein the radiographing section has a normal mode (ready state) for conducting radiographing and a standby mode (sleep state).

However, Yamayoshi failed to teach that the radiographing apparatus further comprises a second operating device in a vicinity of the radiographing section to change the radiographing condition set by the first operating device, and wherein the second operating device cancels the standby mode of the radiographing section.

Tachi *et al.* disclosed a radiographing apparatus comprising a first operating device (700) and a second operating device (500) located in a vicinity of the radiographing section. Tachi *et al.* taught that a proximal operating device which can immediately be operated on the spot while

performing medical treatment or surgical operation has become indispensable in addition to the original control device in another room (column 8, lines 66-67 to column 9, lines 1-15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a second operating device in a vicinity of the radiographing section to change the radiographing condition set by the first operating device, since a person would be motivated to control the radiographing section while performing medical treatment or surgical operation on a patient. Furthermore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the second operating device to cancel the standby mode, since a person would be motivated to operate the radiographing apparatus by using the second operating device.

With regard to claim 17, Yamayoshi in combination with Tachi *et al.* disclosed the radiographic apparatus of claim 13, wherein the second operating device comprises a display member (Tachi *et al.* 546) to display information about the radiographing condition set by the first operating device.

With regard to claim 18, Yamayoshi in combination with Tachi *et al.* disclosed the radiographic apparatus of claim 13. However, Yamayoshi and Tachi *et al.* failed to teach that the first operating device comprises a display member to display information about the radiographing condition changed by the second operating condition.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a first operating device comprising a display member to display information about the radiographing condition changed by the second operating device, since a

person would be motivated to provide a display that immediately informs the user using the first operating device of the current radiographing condition.

With regard to claim 19, Yamayoshi in combination with Tachi *et al.* disclosed the radiographic apparatus of claim 13, wherein the second operating device has a higher priority to set the radiographing condition than the first operating device (inherent, since it could override the condition set by the first operating device).

With regard to claim 20, Yamayoshi in combination with Tachi *et al.* disclosed the radiographing apparatus of claim 13. However, Yamayoshi and Tachi *et al.* failed to teach that when a change of the radiographing condition which cannot be performed by the second operating device is operated, the second operating device comprises a display member to display an indication to show information that the change cannot be performed by the second operating device.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a second operating device that comprises a display member to display an indication to show information that the change cannot be performed by the second operating device, since a person would be motivated to provide a feedback to the user when the user tries to perform a forbidden operation with the radiographing section.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamayoshi (U. S. Patent No. 6,707,880 B2) and Tachi *et al.* (U. S. Patent No. 6,027,247) as applied to claim 13 above, and further in view of Aufrichtig *et al.* (U. S. Patent No. 6,359,961 B1).

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With regard to claim 14, Yamayoshi in combination with Tachi *et al.* disclosed the radiographing apparatus of claim 13. However, Yamayoshi and Tachi *et al.* failed to teach that the radiographing section is connected to the first operating device through a network.

Aufrichtig *et al.* taught connecting a radiographing section (10) to a remote user (1022) through a network.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to connect the radiographing section to the first operating device through a network, since a person would be motivated to provide a communication link between the radiographing section and the first operating device so that they could interact with each other. Furthermore, a network is very flexible since it has the capacity to accommodate additional components.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamayoshi (U. S. Patent No. 6,707,880 B2) and Tachi *et al.* (U. S. Patent No. 6,027,247) as applied to claim 13 above, and further in view of Haumann *et al.* (U. S. Patent No. 6,285,742 B1).

With regard to claim 15, Yamayoshi in combination with Tachi *et al.* disclosed the radiographing apparatus of claim 13. However, Yamayoshi and Tachi *et al.* failed to teach that the second operating device is detachably mounted on the radiographing section.

Haumann *et al.* disclosed an operating device (17) detachably mounted on a radiographing section.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a second operating device detachably mounted on the radiographing section, since a person would be motivated to provide an operating device that

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could be detached from the radiographing section and carried by a technician and allows the technician to set radiographing conditions as he or she moves around the patient.

5. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamayoshi (U. S. Patent No. 6,707,880 B2) and Tachi *et al.* (U. S. Patent No. 6,027,247) as applied to claim 13 above, and further in view of Khutoryansky *et al.* (U. S. Patent No. 5,572,567).

With regard to claim 16, Yamayoshi in combination with Tachi *et al.* disclosed the radiographing apparatus of claim 13. However, Yamayoshi and Tachi *et al.* failed to teach that the second operating device comprises a communication member to communicate with the first operating device wirelessly and to transfer information about the change of the radiographing condition.

Khutoryansky *et al.* disclosed a second operating device that comprises a communication member (column 6, lines 35-37) to communicate with the first operating device wirelessly (infrared) and to transfer information about the change of the radiographing condition.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a second operating device that communicates wirelessly with the first operating device, since a wireless remote would allow a person to move around without restriction.

6. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamayoshi (U. S. Patent No. 6,707,880 B2) and Tachi *et al.* (U. S. Patent No. 6,027,247) as applied to claim 13 above, and further in view of Strasser *et al.* (U. S. Patent No. 5,867,561).

With regard to claim 21, Yamayoshi in combination with Tachi *et al.* disclosed the radiographing apparatus of claim 13. However, Yamayoshi and Tachi *et al.* failed to teach that

the standby mode is established when the radiographing apparatus is not used for a predetermined time period.

Strasser *et al.* disclosed a control section (52, 70) that monitors the non-use time period of a radiographing section (10) (column 5, lines 63-67; column 6, line 1). When the non-use time period exceeds a predetermined time (T_1), the control section establishes a standby (sleep) mode in the radiographing section (column 6, lines 1-10). This standby mode is designed to reduce energy consumption.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to establish a standby mode when the radiographing apparatus has not been used for a predetermined time period, since a person would be motivated to reduce energy consumption.

With regard to claim 22, Yamayoshi in combination with Tachi *et al.* disclosed the radiographing apparatus of claim 21, wherein the second operating device comprises a display member (546) to display information that the standby mode is established (inherent, since the display member displays a photographing state).

7. Claims 23-25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takasawa (U. S. Patent No. 6,501,827 B1) in view of Strasser *et al.* (U. S. Patent No. 5,867,561) and Adamski *et al.* (U. S. Patent No. 4,918,714).

With regard to claims 23-25, Takasawa disclosed a radiographing apparatus, comprising: a plurality of radiographing sections (14, 16) having a normal mode for radiographing a patient to obtain a medical image of the patient; and a control section (17), connected to a network (110) so as to receive a radiographing order (3), for controlling the plurality of radiographing sections.

However, Takasawa failed to teach that the radiographing sections having a standby mode, wherein when the radiographing sections are in the standby mode, the control section cancels the standby mode of a specific radiographing section in accordance with the radiographing order received through the network and puts the radiographing section in the normal mode.

Strasser *et al.* disclosed a control section (52, 70) that monitors the non-use time period of a radiographing section (10) (column 5, lines 63-67; column 6, line 1). When the non-use time period exceeds a predetermined time (T_1), the control section establishes a standby (sleep) mode in the radiographing section (column 6, lines 1-10). This standby mode is designed to reduce energy consumption.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to establish a standby mode when a radiographing section has not been used for a predetermined time period, since a person would be motivated to reduce energy consumption.

Adamski *et al.* disclosed a control section (40) that cancels the standby mode (wait state) when a signal is detected (column 7, lines 56-61).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the control section to cancel the standby mode and put the specific radiographing section in the normal mode when a radiographing order (signal) is received, since a person would be motivated to expedite the fulfillment of the order by preparing the specific radiographing section for operation as soon as the order is received.

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With regard to claim 34, claim 34 fails to set forth additional structural limitation. Accordingly, it is rejected with claim 23. MPEP § 2114.

8. Claims 26-28, 30, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamayoshi (U. S. Patent No. 6,707,880 B2) in view of Adamski *et al.* (U. S. Patent No. 4,918,714).

With regard to claims 26-28 and 30, Yamayoshi disclosed a radiographic apparatus, comprising: a plurality of radiographic sections (3, 17), having a normal mode (ready state) and a standby mode (sleep state), for radiographing a patient to obtain a medical image of the patient in the normal mode; an irradiating section (1) for irradiating radiation to the radiographing section; and a control section (7) for controlling the radiographing section.

However, Yamayoshi failed to teach: (1) the radiographing apparatus further comprises a plurality of irradiating sections each correlated with one of the plurality of radiographing sections; and (2) when one of the irradiating sections is operated, the control sections cancels the standby mode of the correlated radiographing section in accordance with the operation of the irradiating section and puts the correlated radiographing section in the normal mode.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a plurality of irradiating sections each correlated with one of the plurality of radiographing sections, since a person would be motivated to reduce waiting time by imaging several patients simultaneously.

Adamski *et al.* disclosed a control section (40) that cancels the standby mode (wait state) when a signal is detected (column 7, lines 56-61).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the control section to cancel the standby mode of the radiographing section correlated to the irradiating section and puts the correlated radiographing section in the normal mode, since a person would be motivated to expedite imaging by preparing the correlated radiographing section for operation as soon as possible.

With regard to claim 33, Yamayoshi in combination with Adamski *et al.* disclosed the radiographing apparatus of claim 30. However, Yamayoshi and Adamski *et al.* failed to teach that the control section enters the standby mode when all of the plurality of radiographing sections are in the standby mode.

Adamski *et al.* disclosed a control section (40) that establishes the standby mode (wait state) for itself after it has accomplished all assigned tasks (column 7, lines 56-61).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the control section to establish the standby mode for itself after all of the plurality of radiographing sections enter the standby mode, since a person would be motivated to save additional energy once all radiographing sections have been put in standby mode.

9. Claims 29, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamayoshi (U. S. Patent No. 6,707,880 B2) and Adamski *et al.* (U. S. Patent No. 4,918,714) as applied to claims 26 and 30 above, and further in view of Strasser *et al.* (U. S. Patent No. 5,867,561).

With regard to claims 29 and 31, Yamayoshi in combination with Adamski *et al.* disclosed the radiographing apparatus of claims 26 and 30. However, Yamayoshi and Adamski

et al. failed to teach that a radiographing section enters the standby mode when the radiographing section does not conduct a radiographing operation for a predetermined time period.

Strasser *et al.* disclosed a control section (52, 70) that monitors the non-use time period of a radiographing section (10) (column 5, lines 63-67; column 6, line 1). When the non-use time period exceeds a predetermined time (T_1), the control section establishes a standby (sleep) mode in the radiographing section (column 6, lines 1-10). This standby mode is designed to reduce energy consumption.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to establish a standby mode when a radiographing section has not been used for a predetermined time period, since a person would be motivated to reduce energy consumption.

With regard to claim 32, Yamayoshi in combination with Strasser *et al.* and Adamski *et al.* disclosed the radiographing apparatus of claim 31. However, Yamayoshi, Strasser *et al.*, and Adamski *et al.* failed to teach that the control section sets the individual predetermined time period for each of the plurality of radiographing sections based on a frequency of use of each of the plurality of radiographing sections.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure the control section to set the predetermined time for each of the plurality of radiographing sections based on a frequency of use of each of the plurality of radiographing sections, since a person would be motivated to make efficient use of the radiographing sections by customizing the time period for each radiographing section (*e. g.*, setting a longer predetermined time for those high-usage radiographing sections would cause less

disruption in their use, while setting a shorter predetermined time for low-usage radiographing sections would reduce energy consumption).

Response to Arguments

10. Applicant's arguments with respect to claims 13-34 have been considered but are moot in view of the new ground(s) of rejection.

With regard to claim 13, the recitations "located remote from the radiographing section" and "located in a vicinity of the radiographing section" are not accorded any patentable weight since they fail to set forth additional structural limitation. MPEP § 2114.

The applicant argues that Adamski *et al.* failed to teach anything about receiving a radiographing order through a network and canceling a standby mode in accordance with such a radiographing order received through the network. The examiner would like to point out that the disclosure of Adamski *et al.* was only relied upon to teach a microprocessor (or anything else) that wakes up from a standby mode to a normal mode in response to an external signal or activity.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

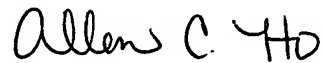
- (1) Taylor *et al.* (U. S. Patent No. 6,614,873 B1) disclosed an interactive digital radiographic system comprising a remote input (54) that accepts examination orders.
- (2) Sako (U. S. Pub. No. 2002/0080918 A1) disclosed a radiographic apparatus and method for obtaining an x-ray image on the basis of a received examination request.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen C. Ho
Patent Examiner
Art Unit 2882

ACH